

CLAIMS:

1. A method for identifying an event among a plurality of events detected by a network management station on a network, which event is indicative of the underlying cause of more than one of said plurality of events, wherein the network management station knows the topology of the network, the method comprising the steps of: considering the location of the network device causing each event in the plurality of events, and determining as said event, the event which has occurred at a location closest to the network management station.

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2. A method as claimed in claim 1, wherein the step of considering the location comprises, for each event in the plurality of events, determining the number of devices and/or links between the device causing the event and the network management station.

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3. A method as claimed in claim 2, wherein the step of determining the number of devices and/or links between the device causing the event and the network management station comprises the steps of: determining the shortest path between the device causing the event and the network management station using the topology of the network and calculating the number of devices and/or links in the determined shortest path.

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4. A method as claimed in claim 2, further comprising the step of: receiving each event, and automatically determining the number of devices and/or links between the device causing the event and the network management station.

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5. A method as claimed in claim 4, further comprising storing the determined number of devices and/or links between the device causing the event and the network management station for each event.

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6. A method as claimed in claim 2, wherein the step of determining as said event comprises the step of: selecting as the event, the event for which the number of devices and/or links between the device causing the event and the network management station, is the fewest.

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7. A method as claimed in claim 1, wherein prior to the step of considering, the method comprises the step of: determining if said plurality of events are related, and if it is determined that said plurality of events are related, storing said plurality of related events in an event list.

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8. A method as claimed in claim 7, wherein the step of determining if the plurality of events are related comprises determining the type of event for each of the plurality of events, and determining that said plurality of events are related if the events are of a similar type.

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9. A method as claimed in claim 7, wherein the method further comprises: receiving each event; and the step of determining if said plurality of events are related comprises the steps of: for each event, determining the time difference between the time of the received event and the time of the immediately preceding event, and determining that the received event is related to the immediately preceding event if the time difference is less than a predetermined time period.

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10. A method as claimed in claim 9, wherein the predetermined time period is in the range 0 seconds to 5 minutes.

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11. A method as claimed in claim 9, wherein, if the received event is determined to be related, the method further comprises the step of: storing the event in a list of related events, and if the received event is determined not to be related, the method further comprises the steps of: comparing the type of events in the existing list of related events, and selecting events of a similar, relevant type.

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12. A method as claimed in claim 7, wherein the method further comprises:
receiving each event; and the step of determining if said plurality of events are related
comprises the steps of: for each event, comparing the type of the received event and
5 the type of the immediately preceding event, and determining that the received event
is related to the immediately preceding event if the step of comparing finds the event
type of the received event is similar to the event type of the immediately preceding
event.
- 10 13. A method as claimed in claim 7, wherein the method further comprises:
receiving each event; and the step of determining if said plurality of events are related
comprises the steps of: for each event, determining the time difference between the
time of the received event and the time of the immediately preceding event, and
comparing the type of the received event and the type of the immediately preceding
event, and determining that the received event is related to the immediately preceding
event if the time difference is less than a predetermined time period and the events are
similar in type.
- 15 14. A method as claimed in claim 13, wherein the predetermined time period is in
the range of 0 seconds to 5 minutes.
- 20 15. A method as claimed in claim 7, further comprising the steps of, receiving
each event; automatically determining if the event is related to the immediately
preceding event, and if it is determined that the received event is related, storing the
received event in the event list.
- 25 16. A method as claimed in claim 15, wherein, if it is determined that the event is
not related to the immediately preceding event, the method further comprises storing
the received event in a new event list.

17. A network management method, for identifying an event among a plurality of events detected by a network management station on a network, which event is indicative of the underlying cause of more than one of said plurality of events, substantially as hereinbefore described with reference to the accompanying drawings.

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18. A computer readable medium having a computer program for carrying out the method as claimed in claim 1.

19. On a computer readable medium, a computer program for identifying an event among a plurality of events detected by a network management station on a network, which event is indicative of the underlying cause of more than one of said plurality of events, wherein the network management station knows the topology of the network, the computer program comprising:

15 program means for considering the location of the network device causing each event in the plurality of events, and

program means for determining as said event, the event which has occurred at a location closest to the network management station.

20. A network management apparatus for managing a network, comprising a network management station having a processor and memory, the memory storing data representing the topology of the network, wherein the network management station is configured to monitor the network and to generate events in finding predefined event conditions; wherein the network management station is further configured to identify an event among a plurality of events generated by the network management station, which event is indicative of the underlying cause of more than one of said plurality of events, by considering the location of the network device causing each event in the plurality of events, and determining as said event, the event which has occurred at a location closest to the network management station.

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